

2020
ANNUAL REPORT
ENVIRONMENTAL
IMPROVEMENTS
ADDENDUM

THE CITY OF
COLUMBUS
ANDREW J. GINTHER, MAYOR

DEPARTMENT OF
PUBLIC UTILITIES



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REDUCING IMPACT OF SIGNIFICANT ENVIRONMENTAL ASPECTS

We consistently review our activities, products and services to identify environmental attributes and their effects on the environment for each of our facilities.

The Columbus Department of Public Utilities (CDPU) is pleased to issue this addendum to the department's 2020 annual report to further detail our commitment and accomplishments for reducing our environmental footprint. Our department is charged with not only protecting public health by providing safe access to, and maintenance of, our most basic utility needs, but also being a responsible steward of our environment through a systematic adherence to our environmental management standards. The City of Columbus is one of very few public utilities in the country known to have an Environmental Management System (EMS) that self-declares conformance to the ISO 14001:2015 standard and, as one of the largest City of Columbus departments, we understand the critical role we play in protecting our air, land, and water.

2020 Accomplishments:

- For the fourth year in a row the Division of Sewerage and Drainage achieved 100% beneficial reuse of its biosolids. (Page 3)
- Division of Water for the second year in a row utilized drinking water treatment residuals for beneficial reuse. (Page 3)

We are proud of the great contributions by all of our employees to deliver services that are environmentally sustainable during an exceptionally challenging year in light of the COVID-19 pandemic. We maintain a commitment to not only meet our environmental obligations, but to exceed them at every opportunity in order to create a lasting impact for our community.



ENERGY CONSERVATION

DEPARTMENT OF PUBLIC UTILITIES FLEET

A key component to our goal of improving air quality is our energy reduction initiative with a focus on reducing emissions. Older inefficient vehicles are being replaced and more alternative fuel vehicles are being added to help continue this trend. As such, the Compost Facility was able to purchase a tractor trailer with emissions controls in 2020.



LANDSCAPING EMISSIONS REDUCTION

The Division of Water acquired a property along Home Road for a future fourth water plant. Demolition of previous buildings on the site was completed in 2020, and 30 acres of native wildflowers were planted to reduce mowing frequency while the site waits for future construction.



WASTE MANAGEMENT

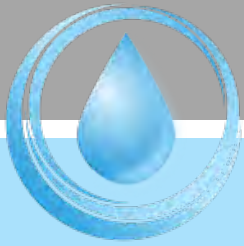
DPU WASTE REDUCTION EFFORTS

2020 DPU WASTE DIVERSION (TONS)	
Hazardous/Non-hazardous/Universal Waste	8.7
Metals Recycling (copper, steel, aluminum, brass, cast iron)	107,356
Employee Recyclables (paper, cardboard, plastic, etc.)	216
Biosolids Beneficial Reuse/Compost/Yard Waste (wet tons)	86,762
Drinking Water Treatment Residuals Beneficial Reuse (dry tons)	1,678

DRINKING WATER TREATMENT RESIDUALS BENEFICIAL REUSE

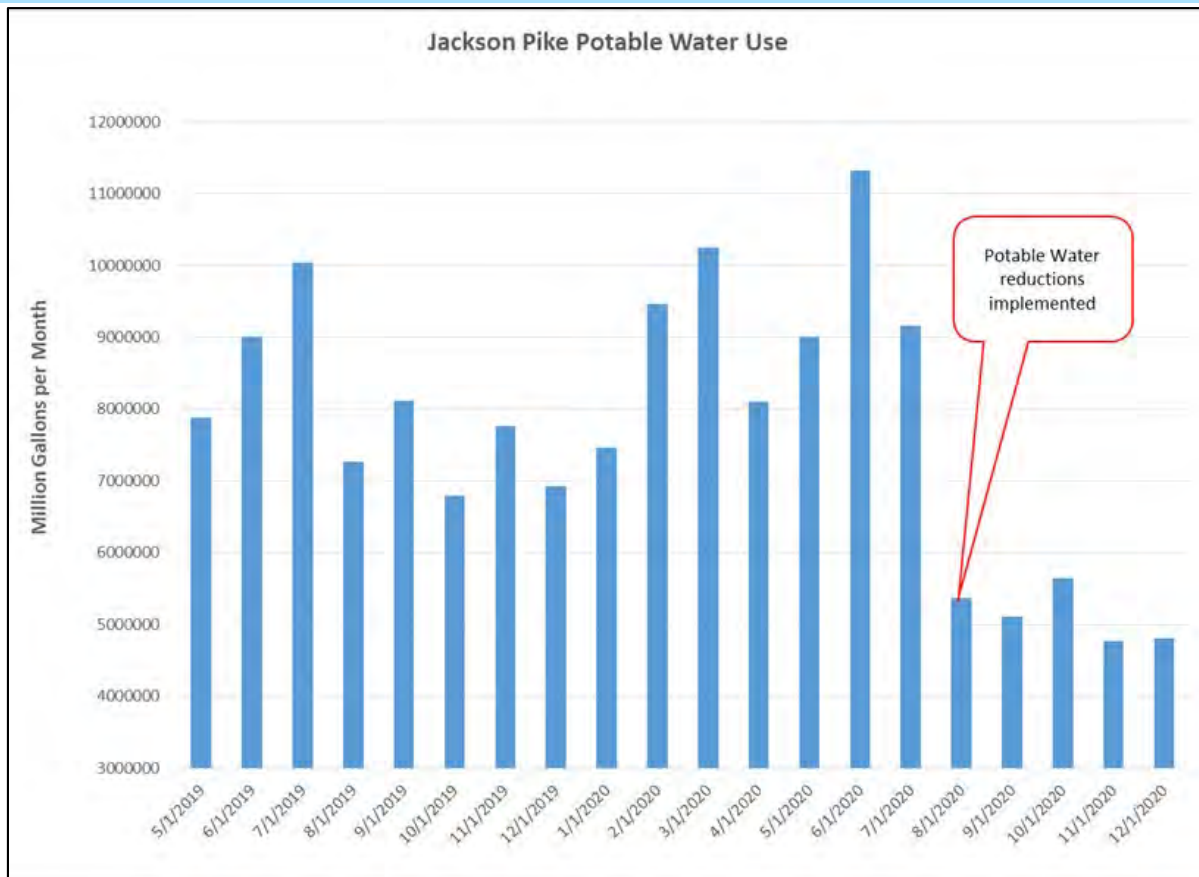
The Hap Cremean Water Plant obtained an individual permit to reuse drinking water treatment material for agronomic benefit. The water treatment plant creates this material as a byproduct of the treatment of drinking water by the addition of lime. It is of beneficial use agriculturally as an ingredient in a soil blend, as a liming material for land application and helps to neutralize soil pH. In 2020, 1,678 dry tons was distributed to 11 different fields.





CLEAN & PROTECT

POTABLE WATER USAGE REDUCTION



In August the Jackson Pike Wastewater Treatment Plant (WWTP) maintenance staff completed a project using only plant resources, not capital funding, to reduce potable water usage at the plant by 12,000-15,000 gallons per day. The reduction comes from converting the water oil cooling systems on four dewatering centrifuges from potable water to plant flushing water (treated wastewater). Additional Operational changes were implemented to the Aeration Blowers cooling system to reduce the potable water usage by over 75,000 gallons per day. Combined, these two changes reduced the potable water usage by over 40 Percent. Future reductions are continually being evaluated throughout the plant.

SOURCE WATER PROTECTION

In 2020, visits were made to 69 businesses within the city's water supply zones of concern as part of the Sourcewater Intake Protection Program. During the visit, personnel explained the connection between materials that can leave the site via storm sewers and other drainage, and the city's water supply. Informational hand-outs were provided on preventative measures and emergency contacts in the event of a spill.



RESPONSIBLE STEWARDSHIP

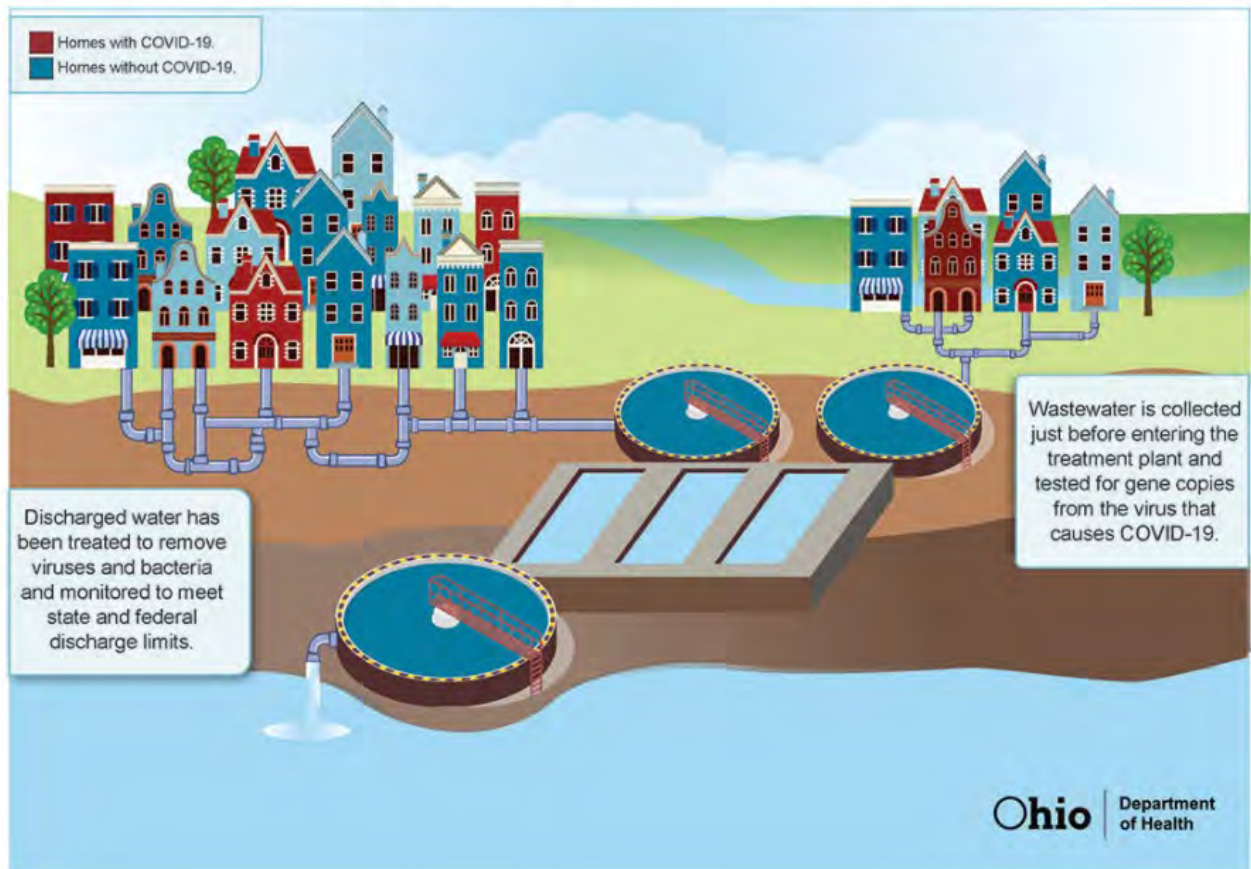
EDUCATION & MITIGATION

PUBLIC EDUCATION AND OUTREACH

2020 was a unique year because of the COVID-19 pandemic. The Division of Sewerage and Drainage participated in the Ohio Coronavirus Wastewater Monitoring Network. The network studies samples of wastewater for coronavirus ribonucleic acid gene copies or fragments. This sampling effort is trying to help communities improve public health by providing a metric that could be used to serve as an early warning of infection, and could help the communities then measure the effectiveness of protective measures employed.

To learn more about the Ohio Coronavirus Wastewater Monitoring Network, please visit: <https://coronavirus.ohio.gov/wps/portal/gov/covid-19/dashboards/other-resources/wastewater>

Ohio Scientists Using Sewage to Track Coronavirus





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